UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,761	11/28/2001	Hiroaki Sugiura	1190-0532P	1204

2292	7590	04/06/2006		EXAMINER

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ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	09/994,761	SUGIURA ET AL.
Office Action Summary	Examiner	Art Unit
	Saeid Ebrahimi-dehKordy	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-10,13,15,17 and 18* is/are rejected.

7)☒ Claim(s) *4,11,12,14,16,19 and 22* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____.

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _12/12/05, 12/9/04_

4)☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 7-05)   *9/20/04, 12/16/02*
    5/17/02, 4/17/02
    11/28/01

Office Action Summary

Part of Paper No./Mail Date 20060319

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 1-2, 5-8, 10, 13, 15 and 17 are rejected under 35 U.S.C. 102(e) as being

anticipated by Kumada (U.S. patent 6,337,922)

Regarding claim 1 and 5 Kumada discloses: A method of outputting original image

data that was generated relative to a first color space (note Figs.18-23, column 11, lines

26-53 where the first color spaces of CIE, XYZ OR CIE lab produced) by an output

device that converts image data of a second color space to a visually-perceptible analog

thereof (note Fig.21 , column 11 lines 53-57 where the second color space was created,

CMYK) the method comprising: receiving from a provider (note Fig.23 item 40) over a

communication channel (note Fig.23 item 30) original image data that was generated

according to a first color space (note Fig.21, column 11 lines 49-53, independent color

space CIE, XYZ OR CIElab) receiving from said provider (note Fig.23 item 40) over a

communication channel (note Fig.23 item 30) along with said original image data, tag

data representing parameters of said first color space (Kumada teaches that the output

device receives along with the image data , tag data representing parameters of the first

color space form the provider, Kumada teaches that the output receives image file

added with a profile (note Fig.2 where the image file is added with a profile, the profile is divided into a header portion and data storage portion, in the header portion, information which is used to manage the profile is stored, in the data storage portion, profile description information for discriminating the profile is stored, column 1 lines 36-46 in addition the, from the prior art, a device profile performs a color conversion process to perform color matching between input and output images using the profile corresponding to a source device before conversion and a profile corresponding to a destination device after conversion, column 1 lines 15-21, thus the profile can include parameters of the color space of the image data) said output device (Fig.23 item 10) automatically converting said original image data into said second color space according to said tag data to produce converted image data of said second color space (note column 1 lines 36-46 in addition the, from the prior art, a device profile performs a color conversion process to perform color matching between input and output images using the profile corresponding to a source device before conversion and a profile corresponding to a destination device after conversion, column 1 lines 15-21, thus the profile can include parameters of the color space of the image data) and said output device converting said converted image data into a visually-perceptible analog thereof (note Figs. 4-5,21, 25, 36-37, Abstract, column 5 lines 4-31, column 6 lines 16-67, column 11 line 27-column 12 lines 67, column 16 lines 23-60)

Regarding claim 2 and 8 Kumada discloses: The method of claim 1, wherein said tag data include a code identifying a color space (note column 1 lines 36-46) primary coordinates (note Figs. 18, 19 and 20, column 11 lines 27-67 and column 12 lines 20-

39) white point brightness (note column 16 lines 37-55) tone characteristics color

reproduction characteristics (still picture/moving picture identification code (note Fig.4

column 5 lines 35-49).

Regarding claim 6 Kumada discloses: The method of claim 5, wherein said default

color space is standard RGB (sRGB) (Figs. 4-8, column 5, lines 21-46,. column 6, lines

22-36).

Regarding claim 7 Kumada discloses: The method of claim 5, further comprising: said

output device retrieving data representing parameters of said default color pace,

wherein said parameters include a code identifying a color space (note column 1 lines

36-46) primary coordinates (note Figs. 18, 19 and 20, column 11 lines 27-67 and

column 12 lines 20-39) white point, brightness, tone characteristics, color reproduction

characteristics, still picture/moving picture identification code or parameters for image

processing (still picture/moving picture identification code (note Fig.4 column 5 lines 35-

49).

Regarding claim 10 Kumada discloses: The method of claim 1, wherein said output

device is a display device capable of displaying an image obtained by conversion from

the original image data, in a display area forming part of a display screen of the display

device and said display device generates color space conversion parameters for the

display area based on the tag data associated with the original image data and area

data representing the display area, and converts the original image data into the image

data of the second color space representing the image displayed in the display area,

based on the generated color conversion parameters (a liquid crystal display device, a

plasma display device. However, a projector, a liquid crystal display device, a plasma

display device are also display devices which can display the image data).

Regarding claim 13 Kumada discloses: An image processing system, having an output

device that converts image data of a second color space (note Fig.21 , column 11 lines

53-57 where the second color space was created, CMYK) to a visually-perceptible

analog of said image data, to output original image data that was generated relative to a

first color space (note Figs.18-23 lines 26-53 where the first color spaces of CIE, XYZ

OR CIE lab produced) the apparatus comprising: a provider of image data (note Fig.23

item 40) a communication channel (Fig.23 item 30) and an output device that converts

image data of a second color space (note Fig.21 , column 11 lines 53-57 where the

second color space was created, CMYK) to a visually-perceptible analog thereof; said

output device being operable to receive said original image data, that was generated

according to a first color space (note Figs.18-23 lines 26-53 where the first color spaces

of CIE, XYZ OR CIE lab produced) from said provider over said communication

channel; said output device being operable to receive, along with said image data, tag

data representing parameters of said first color space from said provider over said

communication channel (Kumada teaches that the output device receives along with the

image data , tag data representing parameters of the first color space form the provider,

Kumada teaches that the output receives image file added with a profile (note Fig.2

where the image file is added with a profile, the profile is divided into a header portion

and data storage portion, in the header portion, information which is used to manage

the profile is stored, in the data storage portion, profile description information for

discriminating the profile is stored, column 1 lines 36-46 in addition the, from the prior

art, a device profile performs a color conversion process to perform color matching

between input and output images using the profile corresponding to a source device

before conversion and a profile corresponding to a destination device after conversion,

column 1 lines 15-21, thus the profile can include parameters of the color space of the

image data) said output device being operable to convert said original image data

relative to said first color space according to said tag data to produce converted image

data of said second color space; and said output device being operable to convert said

converted image data into a visually-perceptible analog thereof (note column 11, Fig.18-

23 , lines 27-62).

Regarding claim 15 Kumada discloses: An image processing system (Figs.23 and 33)

having an output device (10) that converts image data of a second color space for

example, independent color space CIE, XYZ OR CLE Lab) to a visually-perceptible

analog of said image data (note column 11 lines 49-57) to output original image data

that was generated relative to a first color space (note for example, RGB color space

form the scanner) the apparatus comprising: a provider (item 40) of image data; a

communication channel (item 30) and an output device (item 10) that converts image

data of a second color space (note Fig.21 , column 11 lines 53-57 where the second

color space was created, CMYK) to a visually-perceptible analog thereof; said output

device being operable to receive said original image data, that was generated according

to a first color space (item 60) from said provider over said communication channel

(item 30) said output device item (10) being operable to receive along with said image

data, tag data representing parameters of said first color space from said provider over

said communication channel (Kumada teaches that the output device receives along

with the image data , tag data representing parameters of the first color space form the

provider, Kumada teaches that the output receives image file added with a profile (note

Fig.2 where the image file is added with a profile, the profile is divided into a header

portion and data storage portion, in the header portion, information which is used to

manage the profile is stored, in the data storage portion, profile description information

for discriminating the profile is stored, column 1 lines 36-46 in addition the, from the

prior art, a device profile performs a color conversion process to perform color matching

between input and output images using the profile corresponding to a source device

before conversion and a profile corresponding to a destination device after conversion,

column 1 lines 15-21, thus the profile can include parameters of the color space of the

image data) to said first color space (note Figs.18-23 lines 26-53 where the first color

spaces of CIE, XYZ OR CIE lab produced) according to said tag data to produce

converted image data of said second color space and said output device being operable

to convert said converted image data into a visually-perceptible analog thereof said

output device being operable to convert said original image data relative (Figs. 4-5, 21,

25, 36, 37; Abstract; column 5, lines 4-31 and column 6, lines 16-67 and column 11,

line 27 – column 12, line 67; column 16, lines 23-60) Kumada further teaches that

the output device is a monitor or a printer (column 1, lines 24-33; column 5, lines 10-

11; column 6, lines 12-27) a device profile performs a color conversion process to

perform color matching between input and output images using a profile

corresponding to a source device before conversion and a profile corresponding to a

destination device after conversion (column 1, lines 15-21). Thus, the profile can

include parameters of the color space of the image data, Fig.23 item 30, the first color

space is a default color space and the output device is operable to convert the original

image data relative to the second color space (Figs. 4-8, column 5, lines 21-46, column

6, lines 22-36).

Regarding claim 17 Kumada discloses: The image processing system of claim 13,

wherein said output device includes a component of a personal computing device

connected to said network (note Fig.23 item 10 and 11, column 12 lines 5-38).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 3 and 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumada

(U.S. patent 6,337,922) in view of Hibe (U.S. patent 5,359,437)

Regarding claim 3 Kumada fails to teach that the parameters are combination of the

primary coordinates and the tone characteristics or the tone characteristics include a

gamma value for the first color space and table values for tone conversion, or the color

reproduction characteristics include one of RGB signal levels for specific colors or a

combination of hue, chroma and value coordinates. On the other hand Hibi discloses an

apparatus for color conversion having conversion circuit 22 for converting signals of

reflectance read by CCD sensor into signals of lightness scale L*bgr, and an

L*a*b*conversion circuit 23 for converting signals of lightness scale L*bgr into standard

system value (L*a*b*) signals where axis L* of the system values indicatc intensity and

two dimensional surface of axis a* and axis b* orthogonal to thc axis L* indicates

saturation and hue, a hue and chroma conversion circuit 24 generates sirals H (hue)

and C (chroma) from system value L*a*b* signals. Hibi further tcaches a tone

reproduction which controls conversion circuit 29 carries out tone conversion in

accoydance with output characteristics of the image output device, and then canies out

color balance control and contrast control (columd 7, lines 1 1-42). It would have been

obvious to one skilled in the art at the time the invention was made to combine the

teaching of Hibi to the parameters of the color space in the profile taught in Kumada

since Kumada teaches that the profile is for color conversion between input and output

images corresponding to a source device before conversion and a profile

Regarding claim 9 Hibi discloses: The method of claim 3, wherein said hue, chroma

and value coordinates are expressed in absolute magnitudes or relative magnitudes

(note Fig.2 column 6 lines 30-55).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kumada (U.S.

patent 6,337,922) in view of Agarwal et al (U.S. patent 6,509,910)

Regarding claim 18 Agarwal et al disclose: The image processing system of claim 17,

wherein said network connection is wireless (note column 3 lines 62- column 4 line 4) It

would have been obvious to one skilled in the art at the time that invention was made to

combine the teaching of wireless communication networking Agarwal to the system in

Kumada since Kumada does not limit the type of network connection and both of

Kumada and Agarwal teach the transmission and reception of image data

along with a profile through a communication network.

Allowable Subject Matter

3.   Claims 4, 11-12, 14, 16 and 19-22 are objected to as being dependent upon a rejected

base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Claim Objections

4.   Claim 21 is objected to because of the following informalities: claim 21 is dependent on

claim 20 which is "the image processing system" therefor claim 21 need to be addressed as

"image processing system" instead of "method claim" as it has been stated. Appropriate

correction is required.

Contact Information

> Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Saeid Ebrahimi-Dehkordy* whose telephone number is <u>(571) 272-7462</u>.

The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams, can be reached at (571) 272-7471.

Any response to this action should be mailed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

Or faxed to:

(571) 273-8300, (for *formal* communications; please mark **"EXPEDITED PROCEDURE"**)

Or:

(703) 306-5406 (for *informal* or *draft* communications, please label "PROPOSED" or "DRAFT")
Hand delivered responses should be brought to Knox building on 501 Dulany Street, Alexandria, VA.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 305-4750.

Saeid Ebrahimi-Dehkordy
Patent Examiner
Group Art Unit 2626
March 19, 2006

MARK WALLERSON
PRIMARY EXAMINER